Application No. 10/635,818

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) A An isolated and cloned eukaryotic cell in vitro comprising a vector, said

vector comprising (i) a first promoter operably linked to a nucleotide sequence encoding a selectable

marker, wherein said nucleotide sequence lacks a functional polyadenylation signal, and (ii) a second

promoter operably linked to an unpaired splice donor, wherein said vector is non-homologously

integrated into the genome of said eukaryotic cell in such a way that a fusion transcript comprising the

nucleotide sequence encoding the selectable marker or the unpaired splice donor or both and one or more

exons of an endogenous gene is expressed under the control of said first or said second promoter and

wherein said unpaired splice donor is spliced to a splice acceptor of said endogenous gene to produce said

fusion transcript, and coding sequence in said endogenous gene is translated.

3. (Currently Amended) A An isolated and cloned eukaryotic cell in vitro comprising a vector, said

vector comprising (i) a first promoter operably linked to a nucleotide sequence encoding a selectable

marker, wherein said nucleotide sequence lacks a functional polyadenylation signal, and (ii) a second

promoter operably linked to an unpaired splice donor, wherein said vector is non-homologously

integrated into the genome of said eukaryotic cell in such a way that a fusion transcript comprising the

nucleotide sequence encoding the selectable marker or the unpaired splice donor or both and one or more

exons of an endogenous gene is expressed under the control of said first or said second promoter, and

coding sequence in said endogenous gene is translated.

4. (Previously Presented) The eukaryotic cell of claim 2 or 3, wherein said cell is an animal cell.

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5. (Previously Presented) The eukaryotic cell of claim 4, wherein said animal cell is selected from the

group consisting of a mammalian cell, an insect cell, an avian cell, an annelid cell, an amphibian cell, a

reptilian cell, and a fish cell.

6. (Previously Presented) The eukaryotic cell of claim 4, wherein said animal cell is a mammalian cell.

7. (Previously Presented) The eukaryotic cell of claim 6, wherein said mammalian cell is a human cell.

8. (Previously Presented) The eukaryotic cell of claim 2 or 3, wherein said cell is a plant cell.

9. (Previously Presented) The eukaryotic cell of claim 2 or 3, wherein said cell is a fungal cell.

10. (Previously Presented) The eukaryotic cell of claim 9, wherein said fungal cell is a yeast cell.

11 - 21. (Canceled)

22. (Previously Presented) A library of eukaryotic cells in vitro comprising a vector, said vector

comprising (i) a first promoter operably linked to a nucleotide sequence encoding a selectable marker,

wherein said nucleotide sequence lacks a functional polyadenylation signal, and (ii) a second promoter

operably linked to an unpaired splice donor, wherein said vector is non-homologously integrated into the

genome of said eukaryotic cell in such a way that a fusion transcript comprising the nucleotide sequences

encoding the selectable marker or the unpaired splice donor or both and one or more exons of an

endogenous gene is expressed under the control of said first or said second promoter and wherein said

unpaired splice donor is spliced to a splice acceptor of said endogenous gene to produce said fusion

transcript, and coding sequence in said endogenous gene is translated.

23 - 25. (Canceled)

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26. (Currently Amended) The eukaryotic cell of claim 2 or 3, wherein said promoters are selected from

the group consisting of a CMV immediate early gene promoter, an SV40 T antigen promoter, a

tetracycline-inducible promoter, and a β-actin promoter.

27. (Currently Amended) The eukaryotic cell of claim 2 or 3, wherein said selectable marker is selected

from the group consisting of neomycin, hypoxanthine phosphoribosyl transferase, puromycin,

dihydrooratase, glutamine synthetase, histidine D, carbamyl phosphate synthase, dihydrofolate reductase,

multidrug resistance 1, aspartate transcarbamylase, xanthine-guanine phosphoribosyl transferase,

adenosine deaminase, and thymidine kinase.

28. (New) The eukaryotic cell of claims 2 or 3, wherein said first and second promoters are present in

said vector in the same orientation.

29. (New) The eukaryotic cell of claim 28, wherein said vector is linear and wherein said selectable

marker is located 3' to said first promoter.

30. (New) The eukaryotic cell of claim 28, wherein said vector is linear and wherein said second

promoter is located 5' to said unpaired splice donor.

31. (New) The eukaryotic cell of claims 2 or 3, wherein said vector further comprises one or more

transposition signals.

32. (New) The eukaryotic cell of claims 2 or 3, wherein said vector further comprises one or more

amplifiable markers.

33. (New) The eukaryotic cell of claims 2 or 3, wherein said vector further comprises one or more viral

origins of replication.

34. (New) The eukaryotic cell of claims 2 or 3, wherein said vector further comprises one or more viral

replication factor genes.

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